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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/987,007	11/13/2001	Hitoshi Takagi	0090/003001	6355
22893	7590	02/17/2004	EXAMINER	
SMITH PATENT OFFICE 1901 PENNSYLVANIA AVENUE N W SUITE 200 WASHINGTON, DC 20006			WONG, KIN C	
			ART UNIT	PAPER NUMBER
			2651	4

DATE MAILED: 02/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/987,007

Applicant(s)

TAKAGI ET AL

Examiner

K. Wong

Art Unit

2651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-7 is/are rejected.
- 7) ☒ Claim(s) 2 and 3 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other:

Art Unit: 2651

***Drawings***

The drawings (filed on 11/13/01) have been approved by the draftsman.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim (1) are rejected under 35 U.S.C. 102(b) as being anticipated by Guzik et al (6242910).

Regarding claim 1 Guzik et al discloses a head clamping (fixture) apparatus for a magnetic disk tester (see figure 3a and col. 43, line 8 to col. 6, line 12 of Guzik) which tests the electromagnetic transducing characteristics of a least one of a magnetic disk and magnetic head (in col. 7, lines 1-17 and col. 1, lines 16-29 where Guzik describes the head/disk characteristics), the head clamping apparatus rotating the magnetic disk having a plurality of concentric tracks (the plurality of concentric tracks are considered inherent since there are two types of tracks (i.e. concentric or spiral or combination of the two) in disk track formats) and positioning the magnetic head onto a target one of the tracks, and the head clamping apparatus comprising a microstage (element 16 in figure 3A of Guzik) supporting the magnetic head and being moved by a microactuator (elements 56a and 56b in figure 3B) in a direction crossing the tracks.

***Claim Rejections - 35 USC § 103***

Art Unit: 2651

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims (4, 6 and 7) are rejected under 35 U.S.C. 103(a) as being unpatentable over Guzik et al (6242910) in view of Albrecht et al (6229664).

Regarding claims 4 and 7: Guzik et al discloses a magnetic disk tester (see abstract and figure 3A of Guzik et al) including: a coarse stage (see col. 49-54 of Guzik et al) having a head load mechanism on which a head clamp (see col. 4, line 64 to col. 5, line 7 of Guzik et al) is installed, the head clamp holding a piezo-stage (see col. 5, lines 11-20 of Guzik et al) which holds a magnetic head assembly, a scale (see col. 5, lines 65-66 of Guzik et al) made of a film being disposed on a back face of the piezo-stage, and light-shield stripes being deposited on the film at regular intervals; a laser head attached to the coarse stage having a light emission/reception part (elements 68a, 68b, 70a and 70b in figure 3A - optical linear encoder) facing the light-shield stripes of the scale; and positioning means for controlling the position of the head clamp, the laser head emitting a laser beam, the scale detecting (or measuring) the emitted laser beam, the positioning means detecting the position of the magnetic head assembly on a magnetic disk according to the detected laser beam and controlling the position of the head clamp according to an error signal which indicates the difference between the detected position and a reference position (see col. 5, line 58 to col. 6, line 67 of Guzik et al).

Art Unit: 2651

Although Guzik et al discloses all the limitations for the disk tester, Guzik et al fails to mention a reflective scale for detecting the position of the head. Albrecht et al is relied on for the teachings of using the reflective scale for detecting the position of the head (see col. 3, lines 16-39 of Albrecht et al for details). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the position detection of Guzik et al with the reflective scale position detection as taught by Albrecht et al. The rationale is as follows one of ordinary skill in the art would have been motivated to provide a direct correlation of the actuator angular position with the arm/head/disk as suggested in col. 3, lines 36-39 of Albrecht et al.

Claims (5 and 6) are rejected under 35 U.S.C. 103(a) as being unpatentable over Guzik et al (6242910) and Albrecht et al (6229664) as applied to claim 4 above, and further in view of Karaaslan et al (6023145).

Regarding claims 5 and 6: the reasons for Guzik et al and Albrecht et al are stated in above rejection. Guzik et al and Albrecht et al are silent on servo position signal (bursts) for testing the head/disk assembly. Karaaslan et al is relied on for the servo position signal for testing the head/disk assembly (see abstract of Karaaslan et al).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the testing apparatus of Guzik et al and Albrecht et al with the servo position signal as taught by Karaaslan et al. the rationale is as follows: one of ordinary skill in the art would have been motivated to provide two positional

Art Unit: 2651

feedback sources for testing the head/disk characteristics as suggested in col. 2, lines 53-67 of Karaaslan et al.

***Allowable Subject Matter***

Claims (2-3) are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Mager (5808435) and Sorenson et al (6566870) are cited for head/disk tester.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to K. Wong whose telephone number is (703) 305-7772.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Hudspeth can be reached on (703) 308-4825. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for all communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

akw

5 Feb 04

  
DAVID HUDSPETH  
SUPERVISORY PATENT EXAMINER  
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